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Patent
IBM Docket No. FIS920000310US1

REMARKS

Claims 1 to 37 remain in the present application. The specification and claims have been amended for which there is support in the specification, claims and drawings as originally filed.

Reconsideration of the Examiner's decisions and reexamination of this application are respectfully requested.

Objection to the specification:

The specification has been amended to include further description of the "immobile particle" in particular, the disclosure of claim 15 which is an original part of Applicants' patent application has been incorporated into the specification so that the immobile particle has been further described as a "polymer which serves as an insoluble and immobile phase". Accordingly, the objection to the specification has been overcome.

The §112 rejections:

Claims 4 to 13 have been rejected under 35 USC §112, first paragraph, as failing to comply with the enablement requirement. Claims 4 to 13 have also been rejected under 35 USC §112, second paragraph as being indefinite.

The claims have been amended to now recite "a polymer which serves as an insoluble and immobile phase" which is taken from original claim 15. From the background of the invention,

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particularly page 2, lines 13-15, the inventors are principally concerned with a polymer that is insoluble in an aqueous environment. It is believed that claims 4 to 13 fully comply with 35 USC §112, first and second paragraphs, and thus the rejection of claims 4 to 13 under 35 USC §112, first and second paragraphs, has been overcome.

The §102 rejection:

Claims 4 and 5 have been rejected by the Examiner under 35 USC §102(b) as being anticipated by Berger U.S. Patent 4,030,948 (hereafter "Berger").

Claim 4 now recites a matrix material, a polymer which serves as an insoluble and immobile phase in the matrix material and a chelating agent bonded to the insoluble and immobile phase. Thus, as taught in Applicants' specification, the chelating agent is bonded to the insoluble and immobile phase which is included in a matrix material. This matrix material may be, for example, a coating, encapsulant, underfill or even an organic package. A key element of Applicants' invention is the bonding of the chelating agent to the insoluble and immobile phase so that if the matrix is attacked and leached out by the environment, the chelating agent bonded to the insoluble and immobile phase remains to complex with metal ions that may leach out of metal sources within the electronic device.

Berger teaches a coating which is admixed with a chelating agent. There is no disclosure in Berger for a matrix material containing a chelating agent bonded to an insoluble and immobile phase. Accordingly, the Berger coating could be attacked by the environment causing components of the coating and the chelating agent to be leached out, thereby depleting the ability of the coating to complex with metal ions. Accordingly, it is submitted that Berger cannot anticipate Applicants' claim 4.

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Inasmuch as claim 5 depends from claim 4, and since claim 4 is believed to be patentable, then claim 5 should be patentable as well. No independent ground of patentability is asserted for claim 5 at this time.

The §103 rejections:

I. Claims 6 to 9 have been rejected by the Examiner under 35 USC §103(a) as being unpatentable over Raiser et al. U.S. Patent 6,700,209 (hereafter "Raiser") in view of Berger.

(It is respectfully submitted that since Berger is the primary reference, the rejection should be written as Berger in view of Raiser.)

Inasmuch as claims 6 to 9 depend, directly or indirectly, from claim 4, and since claim 4 is believed to be patentable, then claims 6 to 9 should be patentable as well.

In addition, claim 9 is believed to be independently patentable. Claim 9 recites that the composition containing the chelating agent and insoluble and immobile phase is the organic package. Both of Berger and Raiser teach a coating. There is no teaching to have the chelating agent form part of the organic package per se. Accordingly, Berger and Raiser cannot render obvious Applicants' claim 9.

II. Claims 11 to 13 have been rejected by the Examiner under 35 USC §103(a) as being unpatentable over Berger and Raiser and further in view of Ikeda et al. U.S. Patent 5,973,930 (hereafter "Ikeda").

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Inasmuch as claims 11 to 13 depend, directly or indirectly, from claim 4, and since claim 4 is believed to be patentable, then claims 11 to 13 should be patentable as well.

In addition, claim 12 is believed to be independently patentable. Claim 12 recites that the composition containing the chelating agent and insoluble and immobile phase is the printed circuit board.. All of Berger, Raiser and Ikeda teach a coating. There is no teaching to have the chelating agent form part of the printed circuit board per se. Accordingly, Berger, Raiser and Ikeda cannot render obvious Applicants' claim 12.

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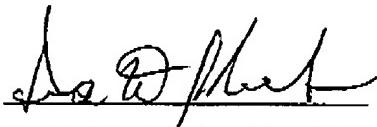
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Summary:

In view of all of the preceding remarks, it is submitted that all of claims 4 to 13 are in condition for allowance. If the Examiner finds this application deficient in any respect, the Examiner is invited to telephone the undersigned at the Examiner's earliest convenience to resolve such deficiency.

Respectfully Submitted,

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